What is claimed is:

- 1. A valve arrangement with a housing, an inlet connection and an outlet connection, which are connected with each other via a flow path, in which is located a closing device, which has a valve seat and a valve element interacting with the valve seat, the valve element being loaded in the direction of the valve seat by a resetting device and being acted upon on the side facing the valve seat by a pressure in a first pressure chamber, said pressure corresponding to the pressure in the inlet connection, when the closing device is closed, and on the side facing away from the valve seat by the pressure in a second pressure chamber, which is connected with the outlet connection via a channel arrangement, in which is located at least one auxiliary valve, and with the first pressure chamber via a throttle, wherein the channel arrangement ends in a suction nozzle arrangement, which is located in the flow path.
- 2. The valve arrangement according to claim 1, wherein the suction nozzle arrangement has at least one suction nozzle, which is directed towards the outlet connection and has a bordering wall, whose outside is exposed to the fluid flowing in the flow path.
- 3. The valve arrangement according to claim 2, wherein the suction nozzle arrangement blocks a fluid entry into the channel.
- 4. The valve arrangement according to claim 1, wherein the suction nozzle arrangement is connected with the housing in at least two positions.
- 5. The valve arrangement according to claim 1, wherein the suction nozzle arrangement has a body, which is located in extension of a pilot valve seat of the auxiliary valve.

- 6. The valve arrangement according to claim 1, wherein the suction nozzle arrangement has a pipe, which has a slot in the direction of the outlet connection.
- 7. The valve arrangement according to claim 6, wherein the pipe is connected with the channel on a frontside.
- 8. The valve arrangement according to claim 1, wherein the pipe is located in the area of a diameter of the outlet connection.
- 9. The valve arrangement according to claim 1, wherein the suction nozzle arrangement has an annular nozzle, whose opening is directed towards the outlet connection.
- 10. The valve arrangement according to claim 1, wherein the suction nozzle arrangement is located in a section of the flow path with reduced cross-section.